

Airline pilots work on Air Force's laser 'warbird'

by Rich Garcia, Directed Energy Directorate

KIRTLAND AFB, N.M. — At the controls of the United States Air Force's first and only Boeing 747-400 freighter aircraft recently was Gerry Elwell. Elwell and Tom LaValley are commercial airline pilots who are also Air Force Reserve majors. Their civilian skills and experience are allowing them to make a unique contribution to a multi-billion-dollar Air Force program here.

Elwell and LaValley are not only capable of flying the 747-400 — perhaps the only pilots in the Air Force who are — but, as experienced Air Force fighter pilots, they are also able to help transform this freighter in the millennium's most futuristic warbird.

This 747 is being altered to become the world's first aircraft armed with a laser that can destroy theater ballistic missiles hundreds of miles away. But a problem for the Air Force was that the military doesn't own any of 400 series freighters and therefore didn't have any active duty pilots trained for that role.

"No one in the Air Force had flown a 747-400," said LaValley. "While the 100, 200 and 300 models of the 747 are basically the same, the 400 is completely different. It's a very complicated aircraft."

Faced with the cost and time of having to train active duty Air Force pilots to fly the 747-400, Airborne Laser program officials began looking into the Air Force Reserve for qualified Reserve pilots. What resulted was Elwell and LaValley, two 747-400 instructor pilots working at the United Air Lines' Denver training facility. Both had been former active duty Air Force fighter pilots, Elwell and LaValley having been F-15 and A-10 pilots respectively. Assigned to the 412th Test Wing at Edwards AFB, Calif., they have been detailed to work at the Airborne Laser System Program Office at Kirtland AFB, N.M.

But they are doing more than just flying the 747-400. Both are serving in an advisory capacity. As the plane undergoes major modifications, the two are putting their experience on fighter planes and the 747-400 freighter to good use. They are working closely with the engineers and technicians on the



A LITTLE EXPLAINING TO DO — Majors Tom LaValley, left, and Gerry Elwell show a group of students a model of the plane they fly and explain how the plane will operate in combat. The two are commercial airline pilots who, as Air Force Reserve officers, are working with the Airborne Laser program office.

project, making recommendations on ways to improve the aircraft to make it more effective, efficient, or easier for future pilots to operate in combat.

Program officials note that the program is on-cost and on-schedule with the planned shoot-down demonstration of a Scud-like missile in 2003. Within ten years, the Air Force expects to have seven of these defensive aircraft in operation around the world. Developing a defense against theater ballistic missiles such as the ones used against U.S. ground troops during the Gulf War has been announced as a top-priority Air Force concern. @